

Electronic Assembly Comprising Solderable Thermal Interface and Methods of Manufacture

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Abstract of the Disclosure

To accommodate high power densities associated with high performance integrated circuits, heat is dissipated from a surface of a die through a solderable thermal interface to a lid or integrated heat spreader. In one embodiment, the die is mounted on an organic substrate using a C4 and land grid array arrangement. In order to maximize thermal dissipation from the die while minimizing warpage of the package when subjected to heat, due to the difference in thermal coefficients of expansion between the die and the organic substrate, a thermal interface is used that has a relatively low melting point in addition to a relatively high thermal conductivity. Methods of fabrication, as well as application of the package to an electronic assembly, an electronic system, and a data processing system, are also described.

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